# **Student and Teacher Oriented System (SATOS)**

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**Abstract** - Living in digital world with using non-digital methods is not a good way. Using Modern technology can reduce human efforts and increase efficiency. In this way the smart work process has helped us implement this Student and Teacher Oriented System. It is designed for online communication between teacher and students regarding gate passes and leaves. This portal provides details of all students and teachers in a single database. This portal is designed to implement digitalization and reduce manpower, time and human error. The database is secure as the unauthorized users are restricted to access the information in the site.

Key Words: online portal, interface, leaves, gate pass, faculty, student.

#### **1. INTRODUCTION**

The project is an online portal for university to maintain centralized data. This innovative system allows teachers to maintain work and manage information sharing with diploma students. It consists of a secure login for all the users of system. Faculty may add students into the system, apply leave application. Higher authorities may add students, teachers into the system, approve gate pass, approve student and teacher leave, add notices to the notice board, make third year project groups. Our purpose to build this system on an online server that minimizes the workload of faculty and less time consuming. Faculty may access and sanction leave documents uploaded by student.

#### **2. EXISTING SYSTEM**

The system in college nowadays of displaying notices and leave applications is done manually which consumes lots of time and manpower. The system of gate pass is also manual and requires the time and manpower. Also data of students is written in registers, etc.

#### **2.1 WORKING IN EXISTING SYSTEM**

The working in manual system in colleges is too time consuming and tedious job to do. All notices are said in class and displayed on notice board but sometimes it is not reached to each and every students.

All marks of weekly test and unit test are displayed on notice board, timetable of daily class routine is displayed on notice board.

#### **3. PROPOSED SYSTEM**

The website will provide a way to manage leave applications, gate pass, notices, etc for student as well as teacher from portal which is developed on PHP and MySQL. This will increase the performance and speed up in conveying of information and approvals of applications. Every users will be provided with unique Login Id and password and restricted access over portal. With this system student data and other tasks can be accessed and maintained in a proper manner.

This process helps in maintaining record and discipline in organization.

## **3.1 STUDENT INTERFACE**

In the student interface there is an Information desk in which notices and student details can be viewed by student. Leave application can be uploaded and gate passes can be generated from the Leave Application and Gate Pass application modules respectively. The student interface is shown in fig. (1).

In the super user interface which can be handled by the Class Representative has special access to access and edit student details.



Fig. (1): Student Interface Flow

#### **3.2 TEACHER INTERFACE**

In the teacher interface the Information desk in which notices and student details can be viewed. Teacher interface has a module of Student Details in which a Teacher can add and remove as well as display student details. The Leave Application module makes it easy for teachers to apply leaves. The teacher interface is shown in fig. (2).



Fig. (2): Teacher Interface Flow

## **3.3 CLASS TEACHER INTERFACE**

In the Class Teacher Interface there is an additional module of approving gate passes and leaves. There is an additional feature of making Final Year Project groups. In this new groups can be created and deleted. Also new tiles can be added, edited and deleted by the Customize Launchpad module.

Access to notice board and student details is also provided in the notice board and student details module. A new module of adding and removing teachers is also provided in this interface. The Class Teacher interface is shown in fig. (3).



Fig. (3): Class Teacher Interface Flow

#### **3.4 HOD INTERFACE**

In the HOD Interface Approval of Teacher leaves can be done. In this Student and Teacher details are displayed along with adding and deleting teacher and student details from database. Final Year Project Group details can also be accessed in this interface. Leave application and Notice board can be controlled from this HOD Id.

A module of Customize Launchpad is also available to add more tiles and delete or edit them. The HOD interface is shown in fig. (4).



Fig. (4): HOD Interface Flow

# **3.5 OFFICE INTERFACE**

The college office staff has access to student and teacher details along with approving gate passes and leaves. The module of notice board allows the office staff to send notices and the module of Teacher details is to add, edit and delete teacher from/to database. The Office Interface is shown in fig. (5)





#### **3.6 PRINCIPAL INTERFACE**

The Principal interface consists of approving pending student and teacher leaves. The module Information desk allows the access to student and teacher details.

The Teacher details module allows to add, delete and edit teacher details from the database. The Notice Board module can allow the Principal to send notices regarding holidays, events, etc. The Principal Interface is shown in fig.(6).



Fig. 6: Principal Interface Flow

#### 4. VALIDATIONS

For each input submitted by the user (student/teacher/HOD/office staff/principal) validation is needed to be performed. No false format of details can be submitted in the input section of different students. Validations with respect to the rules instructed by college authority are done. The Login Id and password depends on the authority it is using because each authority (student/teacher/HOD/office staff/principal) is provided with unique Login Id and password. By this the access is restricted for some users.

## **4.1 ADVANTAGES**

This portal has a login page which allows to login only the registered user and thereby the unauthorized user are prevented to use the side and information in the site. Login using the provided login Id and password through admin side.

This system can be used for quick approval of leaves and gate passes.

Third Year Project groups can be maintained in a record which becomes easy for teachers to access and edit.

Leave note can be uploaded from anywhere using the Internet.

Record of all the students can be maintained and accessed and the chances of human errors is reduced.

It reduces manpower and time.

The portal can be easily viewed on Desktop, Tablets, Mobiles, etc.

#### **4.2 FUTURE SCOPE**

Additional modules of marks and online notes can also be added. Uploading notes by the teachers can reduce the efforts of students as they have to stand in long queues for Xerox of notes.

Attendance system can also be linked to the portal by which the attendance can be maintained in a single database. An online chatting application can also be included to communicate with teachers and students.

## **5. CONCLUSION**

This system in addition to lessening the workload on the institute, it also restricts unauthorized users from accessing the data in the site. It is beneficial as it reduces manpower and time. Due to the portal human errors are reduced as well as paperwork is reduced.

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